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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,895	11/26/2003	Helgo Hagemann	09796503-0156	1156

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EXAMINER
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CHIESA, RICHARD L

ART UNIT	PAPER NUMBER
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1724

DATE MAILED: 06/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/723,895

Applicant(s)

HAGEMANN ET AL.

Examiner

Richard L. Chiesa

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

### **DETAILED ACTION**

#### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### ***Drawings***

2. The drawings filed on November 26, 2003 are accepted by the examiner.

#### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicants are advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1, 11, 12, 14, 15, and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Byassee et al in view of Thomas. Byassee et al disclose an evaporative humidifier (note Figures 4-8) in which virtually all the parts of the humidifier are built-in elements made of injection-molded polypropylene plastic material having antibacterial additives within the plastic composition (note col. 2, line 60 to col. 8, line 36) substantially as claimed. It would appear that Byassee et al may not explicitly state that the evaporative humidifier functions as a cooling tower. In any case, Thomas (note col. 1, lines 4-22) teaches the well-known use of evaporative gas-liquid contact systems with antibacterial built-in elements as cooling towers for the purpose of enhancing heat exchange and reducing spore growth (note col. 3, lines 8-65). Consequently, it would have been readily obvious to one of ordinary skill in the art to employ the Byassee et al evaporative gas-liquid contact apparatus with antibacterial built-in elements as a cooling tower in order to facilitate heat transfer and inhibit spore growth as taught by Thomas.

6. Claims 2, 3, 6, 9, 10, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claim 1 in paragraph 5 above, and further in view of Hand. The prior art, as described above in paragraph 5, discloses a cooling tower substantially as claimed with the possible exception of an antibacterial agent being released from the built-in element into the water. However, Hand (note Figures 1-14, and col. 6, lines 10-17) teaches the use of an antibacterial additive being released into the water from the built-in element of an evaporative gas-liquid contact device for the purpose of ensuring an extended period of protection. Therefore, it would have been obvious to one having ordinary skill in the art to employ a timed

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release of an antibacterial additive from the built-in element of the prior art cooling tower in order to promote an extended period of protection from bacteria growth as taught by Hand.

7. Claims 4, 5, 7, 8, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claims 2 and 1 paragraphs 6 and 7 respectively above, and further in view of either one of Erami or Mawatari et al. The prior art, as described above in either one of paragraphs 5 or 6, discloses a cooling tower built-in element substantially as claimed with the apparent exception of the anti-bacterial additive being either granular or liquid and the built-in element being duroplastic. However, each one of Erami (note col. 1, line 25 to col. 4, line 9) and Mawatari et al (note col. 1, lines 7-30, and col. 14, lines 13-58) teaches the use of these well-known expedients in the evaporative cooling industry for the purpose of ensuring maximum application and for this same reason it would have been obvious to one of ordinary skill in the art to employ such expedients in either one of the prior art cooling tower built-in elements discussed previously above.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicants' disclosure. These references have been cited as art of interest to show other cooling towers and/or anti-bacterial additives.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard L. Chiesa whose telephone number is (571) 272-1154.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane S. Smith, can be reached at (571) 272-1166.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center 1700 receptionist whose telephone number is (571) 272-0987.

Facsimile correspondence must be transmitted through (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Richard L. Chiesa  
June 10, 2005



**RICHARD L. CHIESA**  
**PRIMARY EXAMINER**  
**ART UNIT 1724**

*June 10, 2005*